

CLAIMS

1. A method of modifying properties of a Cu-Ag alloy plate prepared by the steps of:

- 5 (a) casting and rapidly quenching an alloy ingot composed of 4 to 32% by atom of Ag and Cu accounting for the balance, (b) cold rolling, then annealing the ingot at 300 to 500°C for 0.5 to 5 hours under a vacuum, or in an inert gas, reducing gas or mixture of inert and reducing gas atmosphere,
- 10 (c) repeating the above step (b) once or more, and (d) cold rolling as the finish rolling to provide a desired thickness of the plate,

wherein the plate rolled at any reduction ratio in the steps (b) to (d) is heated at different temperature levels,

15 and strength and conductivity of the plate after the annealing are measured for each annealing temperature so as to establish the conductivity-annealing temperature curve and strength-annealing temperature curve as the correlations between annealing temperature and strength and between

20 annealing temperature and conductivity, then, an optimum annealing temperature required to provide a desired conductivity or strength is determined by extrapolating the conductivity-annealing temperature curve or strength-annealing temperature curve at the desired conductivity or

25 strength, and the plate prepared at any reduction ratio is annealed at the optimum annealing temperature.

2. The method of modifying properties of a Cu-Ag alloy plate according to Claim 1, wherein the optimum annealing temperature is determined through measuring tensile strength of the finish-rolled plate after annealing, and drawing the strength-annealing temperature curve based on the tensile strength value.

3. A method of producing a high-strength, high-conductivity Cu-Ag alloy plate, comprising the steps of:

- 10 (a) casting and rapidly quenching an alloy ingot composed of 4 to 32% by atom of Ag and Cu accounting for the balance,
- (b) cold rolling, then annealing the ingot at 300 to 500°C for 0.5 to 5 hours under a vacuum, or in an inert gas, reducing gas or mixture of inert and reducing gas atmosphere,
- 15 (c) repeating the above step (b) once or more,
- (d) cold rolling as the finish rolling to have a desired thickness of the plate, and
- (e) annealing the plate at 150 to 400°C for 0.5 to 5 hours.

20 4. The method of producing a high-strength, high-conductivity Cu-Ag alloy plate according to Claim 3, wherein said annealing step (e) is effected at 150 to 200°C.